PATENT COOPERATION TREATY

PCT

TRANSLATION INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

	's or agent's file reference 2003004 PCT	FOR FURTHER A	CTION	See Form PCT/IPEA/416		
International application No. International filing da			te (day/month/year)	Priority date (day/month/year)		
PCT/FR2004/000015 07.01.200			4	15.01.2003		
Internation	nal Patent Classification (IPC	C) or national classification and	IPC			
G03B	321/62					
Applicant SAINT-GOBAIN GLASS FRANCE						
1	under Article 35 and transmi	tted to the applicant according t	•	International Preliminary Examining Authority		
2.	This REPORT consists of a t	otal of 7	sheets, including	ng this cover sheet.		
3.	This report is also accompan	ied by ANNEXES, comprising:				
	a. (sent to the applied	cant and to the International Bu	reau) a total of	sheets, as follows:		
	sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative					
	Instructions	•	which this Authority cor	nsiders contain an amendment that goes beyond		
				d in item 4 of Box No. I and the Supplemental		
	b. (sent to the Intern	national Bureau only) a total of	(indicate type and number	er of electronic carrier(s))		
	<u> </u>	•				
		computer readable form only, a	s indicated in the Supple	, containing a sequence listing and/or tables emental Box Relating to Sequence Listing (see		
4.	This report contains indication	ons relating to the following iter	ns:			
[Box No. I Bas	sis of the report				
	Box No. II Pri	ority				
	Box No. III No	n-establishment of opinion with	regard to novelty, inven	tive step and industrial applicability		
[Box No. IV Lac	ck of unity of invention				
	Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement			elty, inventive step or industrial applicability;		
	Box No. VI Cer	tain documents cited				
	Box No. VII Certain defects in the international application					
[Box No. VIII Certain observations on the international application					
Date of submission of the demand Date of completion of this report			nis report			
			-			
Name and mailing address of the IPEA/EP			Authorized officer			
Engeimile	No		Tolonbono No			

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/FR2004/000015

Вох	No. I	Basis of the report					
1.		n regard to the language, this report is based on the interna cated under this item.	tional application in the language in whic	ch it was filed, unless otherwise			
			report is based on translations from the original language into the following language, is the language of a translation furnished for the purposes of:				
		international search (Rule 12.3 and 23.1(b))					
		publication of the international application (Rule 1)	2.4)				
		international preliminary examination (Rule 55.2 a	nd/or 55.3)				
2.	rece		gard to the elements of the international application, this report is based on (replacement sheets which have been furnished to the g Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to ort):				
		the international application as originally filed/furnished					
	\boxtimes	the description:					
		pages 1-9		as originally filed/furnished			
		pages*	received by this Authority on				
		pages*	received by this Authority on				
	\boxtimes	the claims:					
		nos1-17		as originally filed/furnished			
		nos.*	as amended (together wi	th any statement) under Article 19			
		nos.*	received by this Authority on				
		nos.*	received by this Authority on				
		the drawings:					
		sheets		as originally filed/furnished			
			received by this Authority on				
		sheets*	received by this Authority on				
		a sequence listing and/or any related table(s) – see Suppl-	emental Box Relating to Sequence Listin	g.			
3.	\Box	The amendments have resulted in the cancellation of:	C I				
٥.							
			the description, pages				
		the drawings, sheets/figs	the claims, nos.				
		the drawings, sheets/figs the sequence listing (specify):					
				_			
4.	\Box	This report has been established as if (some of) the amo					
	Ш	they have been considered to go beyond the disclosure as					
		the description, pages					
		the claims, nos.					
		the drawings, sheets/figs	the drawings, sheets/figs				
		the sequence listing (specify):	the sequence listing (specify):				
		any table(s) related to sequence listing (specify):					
*	If ite	rm 4 applies, some or all of those sheets may be marked "s	uperseded."				

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/FR2004/000015

Box	x No. II Priority
1.	This report has been established as if no priority had been claimed due to the failure to furnish within the prescribed time limit the requested:
	copy of the earlier application whose priority has been claimed (Rule 66.7(a)).
	translation of the earlier application whose priority has been claimed (Rule 66.7(b)).
2.	This report has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rule 64.1). Thus for the purposes of this report, the international filing date indicated above is considered to be the relevant date.
3.	Additional observations, if necessary:
	The present application specifies
	i. a resolution between $5 \cdot 10^3$ and $1 \cdot 10^5$ DPI (see claim 2), and explains that said resolution is obtained by virtue of the particle size, which is between 0.5 and 5 microns (see page 4, lines 30 to 32).
	However, the application for which priority is claimed (FRA 03 00 381) merely specifies a resolution of <u>at least</u> $1 \cdot 10^5$ DPI and provides no explanation with regard to the means by which this result may be achieved.
	Consequently, the priority is not valid for the resolution
	currently claimed.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.
PCT/FR2004/000015

Box	No. IV Lack of unity of invention
1.	In response to the invitation to restrict or pay additional fees the applicant has: restricted the claims. paid additional fees. paid additional fees under protest. neither restricted the claims nor paid additional fees.
2.	This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.
3.	This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is: complied with. not complied with for the following reasons: See separate sheet.
4.	Consequently, this report has been established in respect of the following parts of the international application: all parts.
	the parts relating to claims Nos. 1-2,7-13

International application No.
PCT/FR2004/000015

Box		asoned statement under A ations and explanations su	rticle 35(2) with regard to novelty, inventive step or industrial applicability; pporting such statement	
1.	Statement			
	Novelty (N)	Claims	2, 11-12	YES
		Claims	1, 7-10, 13	NO
	Inventive step	Claims		YES
		Claims	1-2, 7-13	NO
	Industrial appl	licability (IA) Claims	1-17	YES
		Claims		NO

2. Citations and explanations (Rule 70.7)

In the present report, reference is made to the following documents:

D1: US 3 655 263 A

D2: EP 0 561 551 A

D3: US 3 609 000 A

D4: US 2002/093 607 A

D5: EP 0 770 902 A

D6: US 6 304 378 B

D7: EP 0 414 313 A

D8: US 6 327 088 A

D9: GB 1 140 416 A

D10: US 2002/163 722 A

D11: WO 02/41 074 A

D12: EP 0 478 187 A

1. The subject matter of **claim 1** is already known (PCT Article 33(2)) from each of **documents D1 to D3 above**, which disclose a screen comprising a substrate with a diffusing surface layer suitable for obtaining an angle of view less than 180° (see for example the abstract and column 2, lines 16 to 37 of **D1**; or the abstract and figure 1 of **D2** or **D3**).

With regard to the alternative defining an **angle of**view of 180°, it should be noted that this alternative
is not achievable, since an observer located in the
plane of the screen could never look at an image

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

projected on the screen.

- Claim 2 cannot be considered to involve an inventive step (PCT Article 33(3)), since it merely describes a desired result (in particular, a resolution between $5 \cdot 10^3$ and $1 \cdot 10^5$ DPI) without defining any structural element that enables this result to be achieved. It should also be noted that, on the one hand, the desire to obtain a high resolution is well known in the prior art and, on the other hand, it is not clear what technical effect may be obtained by a resolution far higher than can be discerned by the human eye.
- 3. The subject matter of **claims 7 to 10 and 13** is already known from **D1**. Said document discloses a diffusing layer, which:
 - a. includes a binder and particles of metal oxide, particularly alumina, the average size of which is between 0.25 μm and 40 μm , i.e. overlapping the range from 50 nm to $1\mu\text{m}$ of claim 10,
 - b. and is between 0.25 μm and 23 μm thick (from 0.0001 to 0.0009 inches), i.e. overlapping the range from 0.5 μm to 5 μm of claim 13.
- 4. The use of a binder consisting of glass frit or flux according to **claims 11 and 12** does not appear to be suggested in the available prior art, wherein resinbased binders are always used.

 Furthermore, since the application discloses no

advantage or technical effect resulting from this feature alone, claims 11 and 12 could only be considered to involve an inventive step if they were also to include the features defined in claims 7 to 10 and 13.

Supplemental Box

1.

In case the space in any of the preceding boxes is not sufficient. Continuation of: Box IV

- A screen comprising a substrate with a diffusing surface layer capable of achieving an angle of view less than 180° according to claim 1 is already known, for example, from D1 (US 3 655 263 A; see abstract and column 2, lines 16 to 37). Consequently, the first claim defining new subject matter is claim 2, which specifies a resolution between 50000 and 100000 DPI. According to the description of the present application (see last paragraph of page 4, particularly lines 31 to 32, and the text on page 5), this resolution is obtained by means of the structure of the diffusing layer defined in claims 7 to 13. Consequently, claims 1 to 2 and 7 to 13 concern the technical problem of obtaining a high-resolution screen.
- 2. However, claims 3 to 6 and 14 to 16 define a second substrate associated with the substrate of claim 1, and consequently relate to the problem of improving the mechanical strength of the screen (see page 7, lines 19 to 25 of the description).
- 3. Claim 17 relates to the problem of using the screen of claim 1 as a partition between two areas, so that observers on either side of the screen can benefit from the information displayed by the screen.
- 4. The resolution of a screen is obviously technically separate from its mechanical strength and the use to which it is put, which leads to the conclusion that the above three groups of claims do not share a special technical feature whereby they are so mutually linked as to form a single general inventive concept (PCT Rule 13.1 and 13.2).